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## In the Claims:

1. (Currently Amended) A compound of the formula

RO-PAG-X-
$$\begin{pmatrix} CH \\ R^1 \end{pmatrix}_m \begin{pmatrix} CH \\ R^2 \end{pmatrix}_n \begin{pmatrix} O \\ C-O-A \\ I-A \end{pmatrix}$$

wherein R, R<sub>1</sub> and R<sub>2</sub> are individually hydrogen or lower alkyl; X is

O-or-NH-; PAG is a divalent residue of polyalkylene glycol resulting from removal of both of its terminal hydroxy groups, which residue has a molecular weight of from 1,000 to 50,000 Daltons; n is an integer of from 0 to 1; m is an integer of from 4 to 8; and A is a hydrogen or an activated leaving group which when taken together with its attached oxygen atom forms an ester

or hydrolyzable esters thereof wherein A is hydrogen, wherein said PAG residue has a molecular weight of about 10,000 to about 40,000 Daltons when X is O.

- 2. (Cancelled).
- 3. (Currently Amended) The compound of claim 2-1 wherein A is hydrogen.
- 4. (Original) The compound of claim 3 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.

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- 5. (Original) The compound of claim 4 wherein R is methyl.
- 6. (Original) The compound of claim 5 wherein n is 0 and m is 4.
- 7. (Original) The compound of claim 5 wherein PEG has a molecular weight of from 10,000 to 40,000.
- 8. (Original) The compound of claim 6 wherein PEG has a molecular weight of from 20,000 to about 35,000.
- 9. (Currently Amended) The compound of claim 2-1 wherein A is an activated leaving group.
- 10. (Original) The compound of claim 9 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
- 11. (Original) The compound of claim 9 wherein R is methyl.
- 12. (Original) The compound of claim 11 wherein n is 0 and m is 4.
- 13. (Original) The compound of claim 12 wherein PEG has a molecular weight of from 10,000 to 40,000.
- 14. (Original) The compound of claim 13 wherein PEG has a molecular weight of from 20,000 to about 35,000.
- 15. (Original) The compound of claim 1 wherein said compound has the formula

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RO—PAG-NH—
$$\begin{pmatrix} cH \\ R^1 \end{pmatrix}_m \begin{pmatrix} cH \\ R^2 \end{pmatrix}_n \begin{pmatrix} O \\ C \\ C \end{pmatrix}$$

I-A2

wherein A, R, PAG, R, 1 R<sup>2</sup>, m and n are as above.

- 16. (Original) The compound of claim 15 wherein A is hydrogen.
- 17. (Original) The compound of claim 16 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
- 18. (Original) The compound of claim 17 wherein R is methyl.
- 19. (Original) The compound of claim 18 wherein n is 0 and m is 4.
- 20. (Original) The compound of claim 19 wherein PEG has a molecular weight of from 10,000 to 40,000.
- 21. (Original) The compound of claim 20 wherein PEG has a molecular weight of from 20,000 to about 35,000.
- 22. (Original) The compound of claim 18 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
- 23. (Original) The compound of claim 22 wherein R is methyl.
- 24. (Original) The compound of claim 23 wherein n is 0 and m is 4.

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25. (Original) The compound of claim 24 wherein PEG has a molecular weight of from 10,000 to 40,000.

- 26. (Original) The compound of claim 25 wherein PEG has a molecular weight of from 20,000 to about 35,000.
- 27. (Original) The compound of formula

RO—PAG-X—
$$\begin{pmatrix} CH - CH \\ R_3 & R_4 \end{pmatrix}_{W}$$
 I-B

wherein R is hydrogen or lower alkyl; X is-O- or - NH-; PAG is a divalent residue of polyalkylene glycol resulting from removal of both of its terminal hydroxy groups, which residue has a molecular weight of from 1,000 to 50,000 Daltons; w is an integer of from 1 to 3; and one of R<sub>3</sub> and R<sub>4</sub> is lower alkyl and the other is hydrogen or lower alkyl; and A is a hydrogen or an activated leaving group which when taken together with its attached oxygen forms an ester;

or hydrolyzable esters thereof wherein A is hydrogen.

28. (Original) The compound of claim 27 wherein said compound is

**I-B1** 

wherein A, R, PAG, R<sup>3</sup>, R<sup>4</sup>, w and n are as above.

29. (Original) The compound of claim 28 wherein A is hydrogen.

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30. (Original) The compound of claim 29 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.

- 31. (Original) The compound of claim 30 wherein R is methyl.
- 32. (Original) The compound of claim 31 wherein w is 1.
- 33. (Original) The compound of claim 32 wherein PEG has a molecular weight of from 10,000 to 40,000.
- 34. (Original) The compound of claim 33 wherein PEG has a molecular weight of from 20,000 to about 35,000.
- 35. (Original) The compound of claim 28 wherein A is an activated leaving group.
- 36. (Original) The compound of claim 35 wherein PAG is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
  - 37. (Original) The compound of claim 36 wherein R is methyl.
  - 38. (Original) The compound of claim 37 wherein w is 1.
- 39. (Original) The compound of claim 38 wherein PEG has a molecular weight of from 10,000 to 40,000.
- 40. (Original) The compound of claim 39 wherein PEG has a molecular weight of from 20,000 to about 35,000.
  - 41. (Original) The compound of formula

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wherein R is hydrogen or lower alkyl, X is -O- or -NH-, A is a hydrogen or an activated leaving group which when taken together with its attached oxygen atom forms an ester, PAG<sup>1</sup> is a divalent residue of a polyalkylene glycol resulting from the removal of both of the terminal hydroxy groups, said residue having a molecular weight of from about 500 to about 25,000 Daltons, y is an integer from 0 to 3 and v is an integer from 1 to 3; and k is an integer from 1 to 2;

or hydrolyzable esters thereof wherein A is hydrogen.

42. (Original) The compound of claim 41 wherein said compound has the formula

$$RO-PAG^{1}-O(CH_{2})_{k}-O-(CH_{2})_{y}$$
 $CH-C-OA$ 
 $CH$ 

wherein R, PAG<sup>1</sup>, A v, y and k are all as above.

- 43. (Original) The compound of claim 42 wherein A is hydrogen.
- 44. (Original) The compound of claim 43 wherein PAG<sup>1</sup> is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
- 45. (Original) The compound of claim 42 wherein each PAG<sup>1</sup> residue has a molecular weight of 500 to 15,000.
  - 46. (Original) The compound of claim 42 wherein A is a leaving group.
- 47. (Original) The compound of claim 46 wherein said leaving group is N-hydroxysuccinimidyl.
- 48. (Original) The compound of claim 47 wherein PAG<sup>1</sup> is PEG, a divalent polyethylene glycol residue resulting from the removal of both of its terminal hydroxy groups.
  - 49. (Original) The compound of claim 48 wherein R is methyl.
- 50. (Original) The compound of claim 49 wherein each PEG residue has a molecular weight of from 500 to 10,000.

51. (Previously Presented) A process for producing an activated ester of the formula:

$$RO-PAG-X-\begin{pmatrix} CH \\ R^1 \end{pmatrix}_m \begin{pmatrix} CH \\ R^2 \\ n \end{pmatrix}_n \begin{pmatrix} O \\ C-O-A \\ I-A \end{pmatrix}$$

wherein R, R<sub>1</sub> and R<sub>2</sub> are individually hydrogen or lower alkyl; X is

-O- or -NH-; PAG is a divalent residue of polyalkylene glycol resulting from
removal of both of its terminal hydroxy groups, which residue has a molecular
weight of from 1,000 to 50,000 Daltons; n is an integer of from 0 to 1; m is an
integer of from 4 to 8; and A is a hydrogen or an activated leaving group which
when taken together with its attached oxygen atom forms an ester
comprising, condensing a compound of the formula:

 $\mathbf{V}$ 

wherein R, and PAG are as above, and V is -OH or  $-NH_2$ , with the compound of the formula:

$$Y = \begin{pmatrix} CH \\ I \\ R^1 \end{pmatrix}_{m} \begin{pmatrix} CH \\ I^2 \\ R^2 \end{pmatrix}_{n} \begin{pmatrix} O \\ II \\ C-OR^5 \\ V1 \end{pmatrix}$$

wherein  $R^5$  forms a hydrolyzable ester protecting group and Y is halide and  $R^1$ ,  $R^2$ , m, and n, are as above,

to produce an ester of the formula

$$RO-PAG-X-\begin{pmatrix} CH \\ -1 \\ R^1 \end{pmatrix}_m \begin{pmatrix} CH \\ -1 \\ R^2 \end{pmatrix}_n \begin{pmatrix} O \\ -1 \\ -1 \\ -1 \end{pmatrix}$$

wherein R, PAG, X, R<sup>1</sup>, R<sup>2</sup>, R<sup>5</sup>, m and n are as above,

hydrolyzing said ester to form a free acid of the formula:

$$RO-PAG-X-\begin{pmatrix} CH \\ - \\ R^1 \end{pmatrix}_m \begin{pmatrix} CH \\ - \\ R^2 \end{pmatrix}_n - \ddot{C}-OH$$

wherein R, PAG, X, R<sup>1</sup>, R<sup>2</sup>, m and n are as above,

and reacting said free acid with a halide of an activated leaving group in the presence of a coupling agent to produce said activated ester,

and wherein said PAG residue has a molecular weight of about 10,000 to about 40,000 Daltons when X is O.

52. (Previously Presented) The process of claim 51 wherein said leaving group is a N-hydroxysuccinimidyl group.

53. (Original) A process for producing an activated ester of the formula:

RO—PAG-X—
$$\begin{pmatrix} CH - CH \\ CH - CH \\ R_3 & R_4 \end{pmatrix}_W O$$
I-B

wherein R is hydrogen or lower alkyl; X is -O- or-NH-; PAG is a divalent residue of polyalkyleneglycol resulting from removal of both of its terminal hydroxy groups, which residue has a molecular weight of from 1,000 to 50,000 Daltons; w is an integer of from 1 to 3; and one of R<sub>3</sub> and R<sub>4</sub> is lower alkyl and the other is hydrogen or lower alkyl; and A is a hydrogen or an activated leaving group which when taken together with its attached oxygen atom forms an ester

comprising, condensing a compound of the formula:

$$Y = \begin{pmatrix} CH - CH \\ R^3 & R^4 \end{pmatrix}_{W} = \begin{pmatrix} O \\ -C - OR^5 \\ W \end{pmatrix}$$

wherein w, Y, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are as above, Y is halide and R<sup>5</sup> forms a hydrolyzable protecting group

with a compound of the formula:

 $\mathbf{V}$ 

wherein R, and PAG are as above, V is -OH or  $-NH_2$ , to produce an ester of the formula:

$$RO-PAG-X-\left(\begin{array}{ccc}CH-CH\\R^3&R^4\end{array}\right) W XXI$$

wherein w, R, PAG, X, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are as above hydrolyzing said ester to form a free acid of the formula:

wherein R, PAG, X, R<sup>3</sup>, R<sup>4</sup> and R<sup>5</sup> are as above,

and reacting said free acid with a halide of an activated leaving group in the presence of a coupling agent to produce said activated ester.

54. (Original) The process of claim 53 wherein said leaving group is a N-hydroxysuccinimidyl group.

55. (Original) A process for producing an activated ester of the formula:

I-C

wherein R is hydrogen or lower alkyl, X is -O- or -NH, A is a hydrogen or an activated leaving group which when taken together with its attached oxygen atom forms an ester, PAG<sup>1</sup> is a divalent residue of a polyalkylene glycol resulting from the removal of both of the terminal hydroxy groups, said residue having a molecular weight of from about 500 to about 25,000 Daltons, y is an integer from 0 to 3 and v is an integer from 1 to 3; and k is an integer from 1 to 2,

comprising, condensing a compound of the formula:

$$Y-(CH_2)_y$$
  
 $CH-C-OR^5$   
 $Y-(CH_2)_y$   
 $Y-(CH_2)_y$ 

wherein Y is halide, y and v are as above, and R<sup>5</sup> forms a hydrolyzable ester protecting group

with a compound of the formula

$$RO-PAG^{1}-O-(CH_{2})_{k}-V$$

wherein R, PAG<sup>1</sup> and k are as above, V is -OH or -NH<sub>2</sub>,

to produce an ester of the formula:

RO — PAG<sup>1</sup> — O — 
$$(CH_2)_k$$
 —  $\chi$  —  $(CH_2)_y$    
 $CH$  —  $C$  —  $OR^5$    
RO — PAG<sup>1</sup> — O —  $(CH_2)_k$  —  $X$  —  $(CH_2)_V$   $O$    
XXVII

wherein R, PAG<sup>1</sup>, X, R<sup>5</sup>, k, v and y are as above,

hydrolyzing said ester to form a free acid of the formula:

XXVIII

wherein R, PAG<sup>1</sup>, X, k, v and y are as above,

and reacting said free acid with a halide of an activated leaving group in the presence of a coupling agent to produce said activated ester.

56. (Original) The process of claim 55 wherein said leaving group is N-hydroxysuccinimidyl.

## 57. (Original) A conjugate of the formula

RO-PAG-X-
$$\begin{pmatrix} CH \\ R^1 \end{pmatrix}_m \begin{pmatrix} CH \\ R^2 \end{pmatrix}_n \begin{pmatrix} O \\ C'-O-P \\ I-A \end{pmatrix}$$

wherein P is a residue of a biopharmaceutical having a terminal hydroxy group wherein the terminal hydroxy group is removed, R, R<sub>1</sub> and R<sub>2</sub> are individually hydrogen or lower alkyl; X is -O- or -NH-; PAG is a divalent residue of polyalkylene glycol resulting from removal of both of its terminal hydroxy groups, which residue has a molecular weight of from 1,000 to 50,000 Daltons; n is an integer of from 0 to 1; and m is an integer of from 4 to 8.

- 58. (Original) The conjugate of claim 57 wherein P is a glycoside.
- 59. (Original) The conjugate of claim 58 wherein P is a residue of AZT.
- 60. (Original) The conjugate of claim 57 wherein X is -0.
- 61. (Original) The conjugate of claim 60 wherein PAG is a polyethylene glycol residue having a molecular weight of 10,000 to 15,000.

62. (Original) A conjugate of the formula

$$RO-PAG-X-\begin{pmatrix} CH\\ R^1\\ m \end{pmatrix}\begin{pmatrix} CH\\ R^2\\ n \end{pmatrix}\begin{pmatrix} CH\\ -C-N-P\\ I-A \end{pmatrix}$$

wherein P is a residue of a biopharmaceutical having a terminal hydroxy group wherein the terminal hydroxy group is removed, R, R<sub>1</sub> and R<sub>2</sub> are individually hydrogen or lower alkyl; X is -O- or -NH-; PAG is a divalent residue of polyalkylene glycol resulting from removal of both of its terminal hydroxy groups, which residue has a molecular weight of from 1,000 to 50,000 Daltons; n is an integer of from 0 to 1; and m is an integer of from 4 to 8.

- 63. (Original) The conjugate of claim 62 wherein P is a residue of a protein or polypeptide.
  - 64. (Original) The conjugate of claim 63 wherein X is -0.
- 65. (Original) The conjugate of claim 64 wherein PAG is a polyethylene glycol residue having a molecular weight of about 10,000 to 15,000.
- 66. (Original) The conjugate of claim 63 wherein P is the polypeptide T-20 having a sequence according to SEQ ID NO: 1.
  - 67. (Original) The conjugate of claim 64 wherein R is methyl.